

WHAT IS CLAIMED IS:

1. A zippered plastic bag comprising:

first and second panels each having a top, a bottom, and first and second opposing sides, said first and second panels being joined to each other along their respective bottoms, their respective first opposing sides, and their respective second opposing sides; and

a zipper including a male and female track, said male track including a male profile and a first fin portion, said first fin portion being affixed to said first panel in proximity to said top of said first panel, said female track including a female profile and a second fin portion, said second fin portion being affixed to said second panel in proximity to said top of said second panel, said male and female profiles having complementary cross-sections, said first and second fin portions being attached, at least one of said fin portions made from a first resin which is prepared in the presence of a single site catalyst, said first resin having a polydispersity of from about 2 to about 3, a melt index of from about 0.2 to about 20 g/10 min., and a melt flow ratio of from about 12 to about 35, and a second resin which is a low density polyethylene, at least one of said fin portions comprising from about 5 to about 50 wt.% of said first resin, and from about 50 to about 95 wt.% of said second resin; and

a slider being located on said zipper, said slider cooperating with said zipper in opening and closing said plastic bag by moving along said male and female tracks.

2. The plastic bag of Claim 1, wherein said first resin is prepared in the presence of a metallocene catalyst.

3. The plastic bag of Claim 1, wherein said first resin has a density of from about 0.85 to about 0.94 g/cm³.

4. The plastic bag of Claim 1, wherein said first and second fin portions each have lower edges, said lower edges of said first and second fin portions are attached to form a one time openable tamper evident feature.

5. The plastic bag of Claim 1, wherein said first resin has a melt flow ratio of from about 12 to about 31.
6. The plastic bag of Claim 1, wherein said first resin has a melt index of from about 1 to about 17 g/10 min.
7. The plastic bag of Claim 1, wherein each of said first and second fin portions comprises from about 5 to about 50 wt.% of said first resin, and from about 50 to about 95 wt.% of said second resin.
8. The plastic bag of Claim 7, wherein each of said first and second fin portions comprises from about 25 to about 50 wt.% of said first resin, and from about 50 to about 75 wt.% of said second resin.
9. The plastic bag of Claim 7, wherein each of said first and second fin portions comprises from about 5 to about 25 wt.% of said first resin, and from about 75 to about 95 wt.% of said second resin.
10. The plastic bag of Claim 9, wherein each of said first and second fin portions comprises from about 10 to about 15 wt.% of said first resin, and from about 85 to about 90 wt.% of said second resin.
11. The plastic bag of Claim 9, wherein each of said first and second fin portions comprises from about 15 to about 25 wt.% of said first resin, and from about 75 to about 85 wt.% of said second resin.
12. The plastic bag of Claim 1, wherein at least one of said fin portions is prepared by coextruding the first resin and said second resin.
13. The plastic bag of Claim 1, wherein at least one of said fin portions comprises a blend of the first resin and said second resin.

14. A zippered plastic bag comprising:

first and second panels each having a top, a bottom, and first and second opposing sides, said first and second panels being joined to each other along their respective bottoms, their respective first opposing sides, and their respective second
5 opposing sides; and

a zipper including a male and female track, said male track including a male profile and a first fin portion, said first fin portion being affixed to said first panel in proximity to said top of said first panel, said female track including a female profile and a second fin portion, said second fin portion being affixed to said second panel in
10 proximity to said top of said second panel, said male and female profiles having complementary cross-sections, said first and second fin portions are attached, at least one of said fin portions made from a first resin selected from the group consisting of an ultra low density polyethylene, a very low density polyethylene, a metallocene-catalyzed polyethylene, and an elastomer, said first resin having a polydispersity of
15 from about 1 to about 4, a melt index of from about 0.2 to about 20 g/10 min., and a melt flow ratio of from about 12 to about 35, and a second resin which is a low density polyethylene, at least one of said fins comprising from about 5 to about 50 wt.% of said first resin, and from about 50 to about 95 wt.% of said second resin; and

a slider being located on said zipper, said slider cooperating with said zipper in
20 opening and closing said plastic bag by moving along said male and female tracks.

15. The plastic bag of Claim 14, wherein said first resin is a copolymer of ethylene and at least one alpha olefin.

16. The plastic bag of Claim 14, wherein said first resin is an ultra low density polyethylene.

17. The plastic bag of Claim 14, wherein said first resin is a very low density polyethylene.

18. The plastic bag of Claim 14, wherein said first resin is a metallocene-catalyzed polyethylene.

19. The plastic bag of Claim 14, wherein said first resin is an elastomer.
20. The plastic bag of Claim 14, wherein said first resin has a density of from about 0.85 to about 0.94 g/cm³.
21. The plastic bag of Claim 14, wherein said first resin has a polydispersity of from about 1.5 to about 4.
22. The plastic bag of Claim 21, wherein said first resin has a polydispersity of from about 2 to about 4.
23. The plastic bag of Claim 14, wherein said first resin has a melt flow ratio of from about 12 to about 31.
24. The plastic bag of Claim 14, wherein said first resin has a melt index of from about 1 to about 17 g/10 min.
25. The plastic bag of Claim 14, wherein said first and second fin portions each have lower edges, said lower edges of said first and second fin portions are attached to form a one time openable tamper evident feature.
26. The plastic bag of Claim 14, wherein each of said first and second fin portions comprises from about 5 to about 50 wt.% of said first resin, and from about 50 to about 95 wt.% of said second resin.
27. The plastic bag of Claim 26, wherein each of said first and second fin portions comprises from about 25 to about 50 wt.% of said first resin, and from about 50 to about 75 wt.% of said second resin.
28. The plastic bag of Claim 26, wherein each of said first and second fin portions comprises from about 5 to about 25 wt.% of said first resin, and from about 75 to about 95 wt.% of said second resin.

29. The plastic bag of Claim 28, wherein each of said first and second fin portions comprises from about 10 to about 15 wt.% of said first resin, and from about 85 to about 90 wt.% of said second resin.

30. The plastic bag of Claim 28, wherein each of said first and second fin portions comprises from about 15 to about 25 wt.% of said first resin, and from about 75 to about 85 wt.% of said second resin.

31. The plastic bag of Claim 14, wherein at least one of said fin portions is prepared by coextruding the first resin and said second resin.

32. The plastic bag of Claim 14, wherein at least one of said fin portions comprises a blend of the first resin and said second resin.

33. A fastener for a plastic bag, comprising:

a male track including a male profile and a first fin portion; and

a female track including a female profile and a second fin portion, said male and female profiles having complementary cross-sections, at least one of said fin portions made from a first resin which is prepared in the presence of a single site catalyst, said first resin having a polydispersity of from about 2 to about 3, a melt index of from about 0.2 to about 20 g/10 min., and a melt flow ratio of from about 12 to about 35, and a second resin which is a low density polyethylene, at least one of said fin portions comprising from about 5 to about 50 wt.% of said first resin, and from about 50 to about 95 wt.% of said second resin.

34. The fastener of Claim 33, wherein said first and second fin portions are attached.

35. The fastener of Claim 34, wherein said first and second fin portions have lower edges, said lower edges are attached to form a one time openable tamper evident feature.

36. The fastener of Claim 33, wherein said first resin is prepared in the presence of a metallocene catalyst.

37. The fastener of Claim 33, wherein each of said first and second fin portions comprises from about 5 to about 50 wt.% of said first resin, and from about 50 to about 95 wt.% of said second resin.

38. The fastener of Claim 37, wherein each of said first and second fin portions comprises from about 25 to about 50 wt.% of said first resin, and from about 50 to about 75 wt.% of said second resin.

39. The fastener of Claim 37, wherein each of said first and second fin portions comprises from about 5 to about 25 wt.% of said first resin, and from about 75 to about 95 wt.% of said second resin.

40. The fastener of Claim 33, wherein at least one of said first and second fin portions comprises from about 25 to about 50 wt.% of said first resin, and from about 50 to about 75 wt.% of said second resin.

41. The fastener of Claim 33, wherein at least one of said first and second fin portions comprises from about 5 to about 25 wt.% of said first resin, and from about 75 to about 95 wt.% of said second resin.

42. The fastener of Claim 41, wherein at least one of said first and second fin portions comprises from about 15 to about 25 wt.% of said first resin, and from about 75 to about 85 wt.% of said second resin.

43. The fastener of Claim 33, wherein at least one of said fin portions is prepared by coextruding the first resin and said second resin.

44. The fastener of Claim 33, wherein at least one of said fin portions comprises a blend of the first resin and said second resin.

45. A fastener for a plastic bag, comprising:
a male track including a male profile and a first fin portion; and
a female track including a female profile and a second fin portion, said male
and female profiles having complementary cross-sections, at least one of said fin
5 portions made from a first resin selected from the group consisting of an ultra low
density polyethylene, a very low density polyethylene, and a metallocene-catalyzed
polyethylene, said first resin having a polydispersity of from about 1 to about 4, a melt
index of from about 0.2 to about 20 g/10 min., and a melt flow ratio of from about 12
to about 35, and a second resin which is a low density polyethylene, at least one of
10 said fins comprising from about 5 to about 50 wt.% of said first resin, and from about
50 to about 95 wt.% of said second resin.
46. The fastener of Claim 45, wherein said first and second fin portions are
attached.
47. The fastener of Claim 46, wherein said first and second fin portions have
lower edges, said lower edges are attached to form a one time openable tamper
evident feature.
48. The fastener of Claim 45, wherein said first resin is an ultra low density
polyethylene.
49. The fastener of Claim 45, wherein said first resin is a very low density
polyethylene.
50. The fastener of Claim 45, wherein said first resin is a metallocene-catalyzed
polyethylene.
51. The fastener of Claim 45, wherein said first resin has a polydispersity of from
about 1.5 to about 4.

52. The fastener of Claim 45, wherein each of said first and second fin portions comprises from about 5 to about 50 wt.% of said first resin, and from about 50 to about 95 wt.% of said second resin.

53. The fastener of Claim 52, wherein each of said first and second fin portions comprises from about 25 to about 50 wt.% of said first resin, and from about 50 to about 75 wt.% of said second resin.

54. The fastener of Claim 52, wherein each of said first and second fin portions comprises from about 5 to about 25 wt.% of said first resin, and from about 75 to about 95 wt.% of said second resin.

55. The fastener of Claim 54, wherein each of said first and second fin portions comprises from about 15 to about 25 wt.% of said first resin, and from about 75 to about 85 wt.% of said second resin.

56. The fastener of Claim 45, wherein at least one of said first and second fin portions comprises from about 25 to about 50 wt.% of said first resin, and from about 50 to about 75 wt.% of said second resin.

57. The fastener of Claim 45, wherein at least one of said first and second fin portions comprises from about 5 to about 25 wt.% of said first resin, and from about 75 to about 95 wt.% of said second resin.

58. The fastener of Claim 57, wherein at least one of said first and second fin portions comprises from about 15 to about 25 wt.% of said first resin, and from about 75 to about 85 wt.% of said second resin.

59. The fastener of Claim 45, wherein at least one of said fin portions is prepared by coextruding the first resin and said second resin.

60. The fastener of Claim 45, wherein at least one of said fin portions comprises a blend of the first resin and said second resin.

61. A zippered plastic bag comprising:

first and second panels each having a top, a bottom, and first and second opposing sides, said first and second panels being joined to each other along their respective bottoms, their respective first opposing sides, and their respective second
5 opposing sides; and

a zipper including a male and female track, said male track including a male profile and a first fin portion, said first fin portion being affixed to said first panel in proximity to said top of said first panel, said female track including a female profile and a second fin portion, said second fin portion being affixed to said second panel in
10 proximity to said top of said second panel, said male and female profiles having complementary cross-sections, at least one of said fin portions made from a first resin which is prepared in the presence of a single site catalyst, said first resin having a polydispersity of from about 2 to about 3, a melt index of from about 0.2 to about 20 g/10 min., and a melt flow ratio of from about 12 to about 35, and a second resin
15 which is a low density polyethylene, at least one of said fin portions comprising from about 50 to 100 wt.% of said first resin, and from 0 to about 50 wt.% of said second resin; and

a slider being located on said zipper, said slider cooperating with said zipper in opening and closing said plastic bag by moving along said male and female tracks.

20 62. The plastic bag of Claim 61, wherein said first and second fin portions are attached.

63. The plastic bag of Claim 62, wherein said first and second fin portions have lower edges, said lower edges are attached to form a one time openable tamper evident feature.

64. The plastic bag of Claim 61, wherein said first resin is prepared in the presence of a metallocene catalyst.

65. The plastic bag of Claim 61, wherein said first resin is an elastomer.

66. The plastic bag of Claim 61, wherein at least one of said fin portions comprises from about 50 to about 90 wt.% of said first resin, and from about 10 to about 50 wt.% of said second resin.

67. The plastic bag of Claim 66, wherein at least one of said fin portions comprises from about 60 to about 85 wt.% of said first resin, and from about 15 to about 40 wt.% of said second resin.

68. The plastic bag of Claim 66, wherein at least one of said fin portions comprises from about 50 to about 75 wt.% of said first resin, and from about 25 to about 50 wt.% of said second resin.

69. The plastic bag of Claim 68, wherein at least one of said fin portions comprises from about 50 to about 60 wt.% of said first resin, and from about 40 to about 50 wt.% of said second resin.

70. The plastic bag of Claim 61, wherein each of said fin portions comprises from about 50 to 100 wt.% of said first resin, and from 0 to about 50 wt.% of said second resin.

71. The plastic bag of Claim 70, wherein each of said fin portions comprises from about 50 to about 90 wt.% of said first resin, and from about 10 to about 50 wt.% of said second resin.

72. The plastic bag of Claim 71, wherein each of said fin portions comprises from about 60 to about 85 wt.% of said first resin, and from about 15 to about 40 wt.% of said second resin.

73. The plastic bag of Claim 71, wherein each of said fin portions comprises from about 50 to about 75 wt.% of said first resin, and from about 25 to about 50 wt.% of said second resin.

74. The plastic bag of Claim 73, wherein each of said fin portions comprises from about 50 to about 60 wt.% of said first resin, and from about 40 to about 50 wt.% of said second resin.

75. The plastic bag of Claim 61, wherein at least one of said fin portions is prepared by coextruding the first resin and said second resin.

76. The fastener of Claim 61, wherein at least one of said fin portions comprises a blend of the first resin and said second resin.

Continued on next page

77. A zippered plastic bag comprising:

first and second panels each having a top, a bottom, and first and second opposing sides, said first and second panels being joined to each other along their respective bottoms, their respective first opposing sides, and their respective second
5 opposing sides; and

a zipper including a male and female track, said male track including a male profile and a first fin portion, said first fin portion being affixed to said first panel in proximity to said top of said first panel, said female track including a female profile and a second fin portion, said second fin portion being affixed to said second panel in
10 proximity to said top of said second panel, said male and female profiles having complementary cross-sections, at least one of said fin portions is made from a first resin that is an ultra low density polyethylene, an elastomer, a metallocene-catalyzed linear low density polyethylene, or a very low density polyethylene, said first resin having a polydispersity of from about 1 to about 4, a melt index of from about 0.2 to
15 about 20 g/10 min., and a melt flow ratio of from about 12 to about 35, and a second resin which is a low density polyethylene, at least one of said fin portions comprising from about 50 to about 90 wt.% of said first resin, and from about 10 to about 50 wt.% of said second resin; and

a slider being located on said zipper, said slider cooperating with said zipper in
20 opening and closing said plastic bag by moving along said male and female tracks.

78. The plastic bag of Claim 77, wherein said first and second fin portions are attached.

79. The plastic bag of Claim 78, wherein said first and second fin portions have lower edges, said lower edges are attached to form a one time openable tamper evident feature.

80. The plastic bag of Claim 77, wherein said first resin is an ultra low density polyethylene.

81. The plastic bag of Claim 77, wherein said first resin is a very low density polyethylene.

82. The plastic bag of Claim 77, wherein said first resin is a metallocene-catalyzed polyethylene.

83. The plastic bag of Claim 77, wherein said first resin is an elastomer.

84. The plastic bag of Claim 77, wherein at least one of said fin portions comprises from about 60 to about 85 wt.% of said first resin, and from about 15 to about 40 wt.% of said second resin.

85. The plastic bag of Claim 77, wherein at least one of said fin portions comprises from about 50 to about 75 wt.% of said first resin, and from about 25 to about 50 wt.% of said second resin.

86. The plastic bag of Claim 85, wherein at least one of said fin portions comprises from about 50 to about 60 wt.% of said first resin, and from about 40 to about 50 wt.% of said second resin.

87. The plastic bag of Claim 77, wherein each of said fin portions comprises from about 50 to about 90 wt.% of said first resin, and from about 10 to about 50 wt.% of said second resin.

88. The plastic bag of Claim 87, wherein each of said fin portions comprises from about 60 to about 85 wt.% of said first resin, and from about 15 to about 40 wt.% of said second resin.

89. The plastic bag of Claim 87, wherein each of said fin portions comprises from about 50 to about 75 wt.% of said first resin, and from about 25 to about 50 wt.% of said second resin.

90. The plastic bag of Claim 89, wherein each of said fin portions comprises from about 50 to about 60 wt.% of said first resin, and from about 40 to about 50 wt.% of said second resin.

91. The plastic bag of Claim 77, wherein at least one of the fins is prepared by coextruding the first resin and said second resin.

92. The plastic bag of Claim 77, wherein at least one of said fin portions comprises a blend of the first resin and said second resin.

93. A fastener for a plastic bag, comprising:

a male track including a male profile and a first fin portion; and

a female track including a female profile and a second fin portion, said male and female profiles having complementary cross-sections, at least one of said fin portions made from a first resin which is prepared in the presence of a single site catalyst, said first resin having a polydispersity of from about 2 to about 3, a melt index of from about 0.2 to about 20 g/10 min., and a melt flow ratio of from about 12 to about 35, and a second resin which is a low density polyethylene, at least one of said fin portions comprising from about 50 to 100 wt.% of said first resin, and from 0 to about 50 wt.% of said second resin.

94. The fastener of Claim 93, wherein said first and second fin portions are attached.

95. The fastener of Claim 94, wherein said first and second fin portions have lower edges, said lower edges are attached to form a one time openable tamper evident feature.

96. The fastener of Claim 93, wherein said first resin is prepared in the presence of a metallocene catalyst.

97. The fastener of Claim 93, wherein said first resin is an elastomer.

98. The fastener of Claim 93, wherein at least one of said fin portions comprises from about 50 to about 90 wt.% of said first resin, and from about 10 to about 50 wt.% of said second resin.

99. The fastener of Claim 98, wherein at least one of said fin portions comprises from about 60 to about 85 wt.% of said first resin, and from about 15 to about 40 wt.% of said second resin.

100. The fastener of Claim 98, wherein at least one of the fin portions comprises from about 50 to about 75 wt.% of said first resin, and from about 25 to about 50 wt.% of said second resin.

101. The fastener of Claim 100, wherein at least one of the fin portions comprises from about 50 to about 60 wt.% of said first resin, and from about 40 to about 60 wt.% of said second resin.

102. The fastener of Claim 93, wherein each of the fin portions comprises from about 50 to 100 wt.% of said first resin, and from 0 to about 50 wt.% of said second resin.

103. The fastener of Claim 102, wherein each of the fin portions comprises from about 50 to about 90 wt.% of said first resin, and from about 10 to about 50 wt.% of said second resin.

104. The fastener of Claim 103, wherein each of the fin portions comprises from about 60 to about 85 wt.% of said first resin, and from about 15 to about 40 wt.% of said second resin.

105. The fastener of Claim 103, wherein each of the fin portions comprises from about 50 to about 75 wt.% of said first resin, and from about 25 to about 50 wt.% of said second resin.

106. The fastener of Claim 105, wherein each of the fin portions comprises from about 50 to about 60 wt.% of said first resin, and from about 40 to about 60 wt.% of said second resin.

107. The fastener of Claim 93, wherein at least one of said fin portions is prepared by coextruding the first resin and said second resin.

108. The fastener of Claim 93, wherein at least one of said fin portions comprises a blend of the first resin and said second resin.

109. A fastener for a plastic bag, comprising:

a male track including a male profile and a first fin portion; and

a female track including a female profile and a second fin portion, said male and female profiles having complementary cross-sections, at least one of said fin portions made from a first resin selected from the group consisting of an ultra low density polyethylene, a very low density polyethylene, and a metallocene-catalyzed linear low density polyethylene, said first resin having a polydispersity of from about 1 to about 4, a melt index of from about 0.2 to about 20 g/10 min., and a melt flow ratio of from about 12 to about 35, and a second resin which is a low density polyethylene, at least one of said fins comprising from about 50 to about 90 wt.% of said first resin, and from about 10 to about 90 wt.% of said second resin.

110. The fastener of Claim 109, wherein said first and second fin portions are attached.

111. The fastener of Claim 110, wherein said first and second fin portions have lower edges, said lower edges are attached to form a one time openable tamper evident feature.

112. The fastener of Claim 109, wherein said first resin is an ultra low density polyethylene.

113. The fastener of Claim 109, wherein said first resin is a very low density polyethylene.

114. The fastener of Claim 109, wherein said first resin is a metallocene-catalyzed polyethylene.

115. The fastener of Claim 109 wherein said first resin has a polydispersity of from about 1.5 to about 4.

116. The fastener of Claim 109, wherein at least one of said first and second fin portions comprises from about 60 to about 85 wt.% of said first resin, and from about 15 to about 40 wt.% of said second resin.

117. The fastener of Claim 109, wherein at least one of said first and second fin portions comprises from about 50 to about 75 wt.% of said first resin, and from about 25 to about 50 wt.% of said second resin.

118. The fastener of Claim 117, wherein at least one of said first and second fin portions comprises from about 50 to about 60 wt.% of said first resin, and from about 40 to about 50 wt.% of said second resin.

119. The fastener of Claim 109, wherein each of said fin portions comprises from about 50 to about 90 wt.% of said first resin, and from about 10 to about 50 wt.% of said second resin.

120. The fastener of Claim 119, wherein each of the fin portions comprises from about 60 to about 85 wt.% of said first resin, and from about 15 to about 40 wt.% of said second resin.

121. The fastener of Claim 119, wherein each of the fin portions comprises from about 50 to about 75 wt.% of said first resin, and from about 25 to about 50 wt.% of said second resin.

122. The fastener of Claim 121, wherein each of said first and second fin portions comprises from about 50 to about 60 wt.% of said first resin, and from about 40 to about 50 wt.% of said second resin.

123. The fastener of Claim 109, wherein at least one of said fin portions is prepared by coextruding the first resin and said second resin.

124. The fastener of Claim 109, wherein at least one of said fin portions comprises a blend of the first resin and said second resin.

125. A fastener for a plastic bag, comprising:

a male track including a male profile and a first fin portion; and

a female track including a female profile and a second fin portion, said male and female profiles having complementary cross-sections, at least one of said fin portions made from a first resin being an elastomer, said first resin having a polydispersity of from about 1 to about 4, a melt index of from about 0.2 to about 20 g/10 min., and a melt flow ratio of from about 12 to about 35, and a second resin which is a low density polyethylene, at least one of said fins comprising from about 5 to 100 wt.% of said first resin, and from 0 to about 95 wt.% of said second resin.

126. The fastener of Claim 125, wherein said first and second fin portions are attached to form a one time openable tamper evident feature.

127. The fastener of Claim 125, wherein at least one of said first and second fin portions comprises from about 25 to about 50 wt.% of said first resin, and from about 50 to about 75 wt.% of said second resin.

128. The fastener of Claim 125, wherein at least one of said first and second fin portions comprises from about 5 to about 25 wt.% of said first resin, and from about 75 to about 95 wt.% of said second resin.

129. The fastener of Claim 128, wherein at least one of said first and second fin portions comprises from about 15 to about 25 wt.% of said first resin, and from about 75 to about 85 wt.% of said second resin.

130. The fastener of Claim 125, wherein at least one of said fin portions comprises from about 50 to about 90 wt.% of said first resin, and from about 10 to about 50 wt.% of said second resin.

131. The fastener of Claim 130, wherein at least one of the fin portions comprises from about 60 to about 85 wt.% of said first resin, and from about 15 to about 40 wt.% of said second resin.

132. The fastener of Claim 130, wherein at least one of the fin portions comprises from about 50 to about 75 wt.% of said first resin, and from about 25 to about 50 wt.% of said second resin.

133. The fastener of Claim 132, wherein at least one of said first and second fin portions comprises from about 50 to about 60 wt.% of said first resin, and from about 40 to about 50 wt.% of said second resin.